## CLAIMS

- 1. A discharge tube characterized in that in an airtight envelope a plurality of discharge electrodes is disposed a discharge gap apart and a discharge gas containing Kr is encapsulated in the airtight envelope.
- 2. The discharge tube according to claim 1 characterized in that the discharge gas is constituted of a mixture gas of Kr and  $\rm H_2$ .
- 3. The discharge tube according to claim 1 characterized in that the discharge gas is constituted of a mixture gas of Kr and Ar.
- 4. The discharge tube according to claim 1 characterized in that the discharge gas is constituted of a mixture gas of Kr and Ne.
- 5. A discharge tube that is formed by disposing a plurality of discharge electrodes separated by a discharge gap followed by encapsulating in an airtight envelope together with a discharge gas characterized in that the discharge electrodes are made of zirconium copper obtained by containing zirconium in oxygen-free copper.
- 6. A discharge tube that is formed by disposing a plurality of discharge electrodes, which is made of oxygen-free copper, separated by a discharge gap followed by encapsulating in an airtight envelope together with a discharge gas characterized in that the discharge gas is

constituted of argon and the argon is encapsulated in the airtight envelope at a pressure in the range of 0.3 to 5 atmospheric pressures.

- A discharge tube that is formed by forming an 7. airtight envelope by hermetically sealing openings at both ends of a cylindrical case member made of an insulating material opened at both ends with a pair of cap members double a discharge electrode, encapsulating that discharge gas in the airtight envelope, forming discharge gap between discharge electrode portions of the cap member disposed in the airtight envelope, and forming on an inner wall surface of the case member a triggering discharge film of which both ends are disposed separated discharge gap from small the cap members, by characterized in that the triggering discharge films are formed in the range of 8 to 12 in a circumferential direction of the inner wall surface of the case member at an equal interval.
- 8. A discharge tube that is formed by forming an airtight envelope by hermetically sealing openings at both ends of a case member made of an insulating material opened at both ends with a pair of cap members that double a discharge electrode, encapsulating a discharge gas in the airtight envelope, forming a discharge gap between discharge electrode portions of the cap member disposed in

the airtight envelope, and forming on an inner wall surface of the case member a triggering discharge film of which both ends are disposed separated by a small discharge gap from the cap member, characterized in that the triggering discharge film is made of a carbon base material of which primary raw material is carbon nanotube.

- 9. The discharge tube according to claim 8 characterized in that the triggering discharge film is made of a carbon base material obtained by impregnating a sintered body of a mixture of carbon nanotubes and amorphous carbon with silicone oil.
- 10. A discharge tube that is formed by disposing a plurality of discharge electrodes separated by a discharge gap followed by encapsulating in an airtight envelope together with a discharge gas, and on a surface of the discharge electrode forming a film containing potassium iodide by coating one obtained by adding potassium iodide to a binder made of a sodium silicate solution and pure water, characterized in that an amount of the potassium iodide added to the binder is in the range of 0.01 to 23% by weight.
- 11. The discharge tube according to claim 10 characterized in that an amount of the potassium iodide added to the binder is set in the range of 5 to 15% by weight.

- 12. A surge absorber characterized by forming an airtight envelope by hermetically sealing openings at both ends of a case member made of an insulating material opened at both ends with a pair of cap members that double a discharge electrode, encapsulating a discharge gas in the airtight envelope, forming a discharge gap between discharge electrode portions of the cap member disposed in the airtight envelope, forming on an inner wall surface of the case member a triggering discharge film of which both ends are disposed separated by a small discharge gap from the cap members, and forming on a surface of the discharge electrode portion a film containing an alkali iodide.
- 13. The surge absorber according to claim 12 characterized in that the alkali iodide is a simple substance of potassium iodide (KI), sodium iodide (NaI), cesium iodide (CsI) and rubidium iodide (RbI) or a mixture thereof.